

REMARKS

Claims 1, 3-10, 14-16, 22-24 and 26-29 are pending in the application. In the Office action mailed February 18, 2004, restriction was required among Inventions 1 and 2 and Species 1-6 of invention 1 and subspecies 1 and 2 of invention 1. Pursuant to the restriction requirement under 35 U.S.C. § 121, Applicants elect claims 1-10, 14-16, and 22-29 for further prosecution, without traverse. It is believed that claims 1-10 are generic and at least claims 14-16, and 22-29 are readable on the elected Species 1 of Invention 1. Claims 11-13, 17-21, and 30-40 have been canceled in response to the restriction requirement. Independent claims 1 and 22 and dependent claim 23 have been amended to better define the invention. Claims 2 and 25 have been canceled without prejudice. No new matter is presented. It is kindly requested that the Examiner enter the Amendment and reconsider the application.

Figs. 1-3B were objected to by the Draftsperson under 37 CFR 1.84(b). One new full-tone set of photographs is being submitted herewith as required by the Draftspersons notice. Applicant believes this set of photographs to be sufficient to obviate the Draftspersons objection.

Claims 1, 3, 7, 9-11, 13, 14, 22 and 26-29 were rejected under 35 U.S.C. §102(e) as being anticipated by Whitcher et al. (US 2003/0018381 A1). The Examiner has indicated that Whitcher et al. discloses a stent as claimed by the instant application wherein the stent is made from a substrate having a grain size of less than twenty microns. In rejecting the claims, the Examiner referred Applicant to Figs. 2-4, and paragraphs 0042 and 0062 of the Whitcher et al. reference. Applicant respectfully amends with traverse the §102(e) rejections.

Independent claims 1 and 22 have been amended to include the limitations of dependent claim 2. Claims 1 and 22 now recite that the medical device substrate has an average grain size in the range of one to ten microns. As stated by the Examiner, the

Whitcher et al. reference does not disclose a substrate grain size in range of one to ten microns. Thus, independent claims 1 and 22, as amended, are now outside the scope of what is disclosed in the Whitcher et al. reference. Claims 3, 7, 9-11, 13, 14 depend from claim 1 and claims 26-29 depend from claim 22. Accordingly the amendments to claims 1 and 22 have effectively amended claims 3, 7, 9-11, 13, 14 and claims 26-29. For the reasons laid out above, Applicant respectfully requests that Examiner withdraw the 35 U.S.C. §102(e) anticipation rejection.

Claims 2, 4-6, 8, 15, 16, and 23-25 were rejected under 35 U.S.C. 103(a) as being unpatentable over the Whitcher et al. reference. Examiner has stated that the Whitcher et al. reference discloses that conventional grain sizes are on the order of 10 microns or larger and that the stent of the Whitcher et al. reference is made from a substrate less than 1 micron. Examiner continues, stating that while the Whitcher et al. reference does not disclose grain sizes in the range of 1-10 microns, but that "it would have been an obvious matter of design choice since the applicant has not disclosed that having the grains size in the range of 1-10 microns solves any stated problem or is for any particular purpose and it appears that the stent would perform equally well with the substrate having grain size from 1-10 microns or from 1-500 nanometers or at the conventional grain sizes of 10 microns or little larger." Applicant respectfully disagrees and traverses the 35 U.S.C. 103(a) rejection for the following reasons.

First, the advantages imparted by the reduction of substrate material grain size are noted several times throughout the specification. Among the advantages imparted by a smaller grain size are: an improvement in structural properties; a reduction or elimination in the occurrence of cracks and/or heavy slip band formation; grain-size strengthening resulting in an increased material strength; and allowing the grains within the stent to act more as a continuum and less as a step function, thereby providing a better distribution of stresses within the grains to other grains, thus increasing strength and ductility. The advantages of smaller grain size are specifically noted at the following places in the application: at page 2, lines 12-14 and lines 23-24; on page 3 the paragraph beginning at

line 11; on page 3 at the first paragraph of the Summary of the Invention beginning at line 25; on page 7 beginning at line 29. Therefore, it is respectfully submitted that the application does describe specific advantages imparted by decreasing the grain size to a range of 1-10 microns.

Second, the instant application at page 3 line 13, states that the "ideal result of processing the material to a smaller grain size would result in an average grain size of between approximately one and ten microns," thereby describing a specific grain size range that will impart the most favorable characteristics to a medical device. As noted in the Office action a conventional grain size is on the order of 10 microns or larger. By stating that medical devices with grain sizes smaller than the industry standard, and ideally with grain sizes in the range of 1-10 microns, will impart improved characteristics, the instant application has provided significant support to contradict a design choice type obviousness rejection in view of the Whitcher et al. reference that teaches grains sizes that are smaller by orders of magnitude.

Third, while providing for a grain size range of 1-500 nanometer and stating that a variety of advantages arise from utilizing that size range, the Whitcher et al. reference does not describe a grain size range from 1-10 microns. The omission by Whitcher et al. reference is particularly telling. Indeed, the size range disclosed by Whitcher et al. reference is orders of magnitude smaller than grain size provided in the instant application. By omitting the claimed grain size and providing a grain size that is much smaller than that of the instant application, the Whitcher et al. reference effectively teaches away from using the 1-10 microns size range and cannot render the instant application unpatentable under 35 U.S.C. § 103(a).

Therefore, because advantages of the grain size range of the instant invention are supported by the application, and because the Whitcher et al. reference teaches away from the grain size of claimed by the instant application, it is respectfully submitted that the Whitcher et al. reference does not provide a sufficient basis to support a 35 U.S.C. §

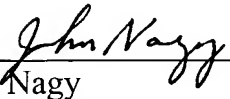
103(a) obviousness rejection. Applicant respectfully request the 35 U.S.C. § 103(a) be withdrawn and the application, as amended, be granted.

In view of the foregoing, Applicant respectfully submits that the claims are in condition for allowance. The undersigned attorney can be reached at (310) 824-5555 to facilitate further prosecution of the application. Reconsideration is respectfully requested.

Respectfully submitted,

FULWIDER PATTON LEE & UTECHT, LLP

By:


John S. Nagy
Registration No. 30,664

JSN/JML:jeb

Howard Hughes Center
6060 Center Drive, Tenth Floor
Los Angeles, CA 90045
Telephone: (310) 824-5555
Facsimile: (310) 824-9696
Customer No. 24201

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